

**Commonwealth of Kentucky**  
**Division for Air Quality**  
**PERMIT STATEMENT OF BASIS**

Title V proposed/final permit, No. V-97-011  
**Owensboro Municipal Utilities, Elmer Smith Station**

Owensboro, Kentucky 42420

June 1, 2000

MARION T. WATSON

**SOURCE DESCRIPTION, CONTROL EQUIPMENTS & CONSTRUCTION DATE:**

- E. Unit 01: 1507 MMBTU/hour coal-fired cyclone unit equipped with a wet limestone scrubber and an electrostatic precipitator commenced construction in 1964.
- E. Unit 02: 2566.4 MMBTU/hour tangentially-fired coal burning unit equipped with a wet limestone scrubber and an electrostatic precipitator commenced construction in 1971.
- E. Unit 03: 8.3 MMBTU/hour No. 2 fuel-oil tangentially fired auxiliary heat exchanger commenced construction in 1964.
- E. Unit 04: Ash handling system equipped with particulate bag filters commenced construction in 1993.
- E. Unit 05: Backup ash handling system equipped with particulate bag filters commenced construction in 1964.
- E. Unit 06: Limestone conveyors equipped with a dust collector and enclosures commenced construction in 1994. Limestone conveyor equipped with insertable dust filters commenced construction 1994.
- E. Unit 07: Limestone ball mills equipped with cyclone dust collector commenced construction in 1993.
- E. Unit 08: Limestone truck/reclaim hopper (equipped with enclosures), haul roads (equipped with wet suppression equipment), and stockpiles (equipped with wet suppression equipment) commenced construction in 1993.
- E. Unit 09: Coal conveyors (equipped with enclosures), scales (equipped with enclosures), crushers (equipped with enclosures), stockpiles (equipped with wet suppression equipment), and haul roads (equipped with wet suppression equipment ) commenced construction in 1964.

**REGULATION APPLICABILITY:**

All the applicable regulations to the emission units are listed in the permit. The following regulations are not applicable based on size of emission unit or applicability date of regulation.

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**Regulations not applicable to Emissions Units 01, 02, and 03 due to applicability date or size of unit:**

Regulation 401 KAR 59:016, New electric utility steam generating unit, incorporating by reference Title 40 CFR Part 60, Subpart Da, Standards of performance for electric utility steam generating units applicable to an emission unit with a capacity of more than 250 MMBTU/hour and commenced on or after September 19, 1997.

Regulation 401 KAR 60:042, Standards of performance for industrial-commercial-institutional steam generating units, incorporating by reference Title 40 CFR Part 60, Subpart Db, applicable to an emission unit of greater than 100 MMBTU/hour and constructed after June 19, 1984.

Regulation 401 KAR 60:043, Standards of performance for small industrial-commercial-institutional steam generating units, incorporating by reference 40 CFR 60, Subpart Dc, applicable to an emission unit with a design capacity of 100 MMBTU/hour or less and greater than or equal to 10 MMBTU/hour and constructed after June 9, 1989.

Regulation 59:015, New indirect heat exchangers: applicable to an emission unit with a design capacity of more than 250 MMBTU/hour and constructed on or after August 17, 1971, applicable to an emission unit with a design capacity of 250 MMBTU/hour or less and constructed on or after April 9, 1972, and applicable to an emission unit with a design capacity of more than 250 MMBTU/hour constructed on or after December 22, 1972 when lignite fuel is burned.

**Regulations ( coal handling ) not applicable to Emission Unit 10 due to the definition of an affected facility:**

Regulation 401 KAR 60:250, Standards of performance for coal preparation plants, adopting by reference Title 40 CFR Part 60, Subpart Y.

**COMMENTS:**

- The permittee has not proposed any alternate operating scenario for any of the emission units.
- This permit does not impose any emission cap on any of the emission units.
- The permittee may assure compliance with the sulfur dioxide allowable standard for emissions units 01 and 02 by using sulfur dioxide continuous emission monitoring data.
- The permittee will be required to conduct at least two particulate matter mass emission performance tests for emissions units 01 and 02 to demonstrate compliance with allowable particulate matter mass emission standard within the term of this permit.
- The permittee may assure continuing compliance with the particulate matter mass emission standard using the COM data as described in the permit. Additional stack testing for particulate matter emissions may be required under circumstances described in the permit.
- Emissions units 09 and 10 are subject to Regulation 401 KAR 63:010, Fugitive emissions and is considered to be compliance when using control measures required by regulation.

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- The three hour averaging time associated with the particulate matter mass emission standards for emissions units 01, 02, 03, 04, 05 and 06 are applicable during compliance demonstration through performance tests if required by the Division.
- The permittee shall submit a compliance assurance monitoring (CAM) plan for emissions units 01 and 02 with an application for significant revision of those emissions units or with the application for Title V renewal.
- This source is subject to acid rain requirements and the Division has issued Phase II acid rain permit for this facility; Permit Number: AR-96-09.
- Emissions Units 02 and 03 are equipped with a wet limestone scrubber to control emissions of sulfur dioxide and U.S. EPA Reference Method 9 opacity determinations of emissions from this type of source and circumstance produces biased results. The permittee may determine compliance with the opacity standard by use of the data generated from the continuous opacity monitoring system (COMS).
- The permittee may assure compliance with the Title 40 Part 60, Subpart OOO affected facilities by performing opacity determinations using US EPA Reference Methods 9 & 22 and monitoring processing rates.
- The permittee may assure compliance with the particulate matter mass emission standards for emissions units 04 and 05 by monitoring and recording each emissions unit's processing rate and monitoring the baghouse to ensure proper operation. Additionally, the permittee shall determine opacity of emissions using US EPA Reference Method 9 periodically.